

AMENDMENTS TO THE CLAIMS

What is claimed is:

1 – 16. (Canceled)

17. (Original) A method of transmit power control in a mobile station, the method comprising:
- transmitting traffic signals over a data rate variant **reverse** traffic channel having a
transmit power level that varies depending on a data transmission rate on the
reverse traffic channel;
 - transmitting a control signal over a data rate invariant reverse control channel having a
data rate that does not change with the data transmission rate on the **reverse**
traffic channel; and
 - changing the transmit power level of the mobile station on the reverse traffic channel
responsive to a change in the data transmission **rate** on the reverse traffic
channel while maintaining the transmit power level on the reverse control channel
at a current transmit power level for the control channel.
18. (Original) The method of claim 17 further comprising encoding control information
transmitted on the reverse control channel with an error detection code to enable detection of
frame errors at a receiver.
19. (Original) The method of claim 18 wherein encoding control information with the error
detection code to enable detection of errors at the receiver comprises encoding the control
information with a cyclic redundancy check code.

20. (Original) The method of claim 17 further comprising transmitting a pilot signal on a reverse pilot channel.

21. (Original) The method of claim 20 further comprising changing the transmit power level of the pilot signal responsive to a change in the data transmission rate, and slaving the transmit power level of the reverse traffic channel to the reverse pilot channel.

22. (Original) The method of claim 21 further comprising adjusting the channel gain of the reverse control channel relative to the reverse pilot channel responsive to a change in the data transmission rate so that the transmit power level of the reverse control channel does not change.

23. (Original) A mobile station comprising:

a transmitter for transmitting traffic signals over a data rate variant reverse traffic channel having a transmit power level that varies depending on a data transmission rate on the reverse traffic channel, and for transmitting a control signal over a data rate invariant reverse control channel having a data rate that does not change with the data transmission rate on the reverse traffic channel;

a receiver to receive power control signals from a radio base station; and

a control unit for controlling the transmit power level of the mobile station based on the power control signals, the control unit being operative to adjust the transmit power level of the mobile station on the reverse traffic channel responsive to a change in the data transmission rate on the reverse traffic channel while maintaining the transmit power level on the reverse control channel at a current transmit power level for the reverse control channel.

24. (Original) The mobile station of claim 23 wherein the control unit further encodes control information transmitted on the reverse control channel with an error detection code to enable detection of frame errors at a receiver.

25. (Original) The mobile station of claim 24 wherein the control unit encodes control information with a cyclic redundancy check code.

26. (Original) The mobile station of claim 23 wherein the transmitter transmits a pilot signal on a reverse pilot channel.

27. (Original) The mobile station of claim 26 further wherein the control unit adjusts the transmit power level of the pilot signal responsive to a change in the data transmission rate on the reverse traffic channel.

28. (Original) The method of claim 27 further wherein the control unit adjusts the channel gain of the reverse control channel relative to the reverse pilot channel responsive to the change in the data transmission rate so that the transmit power level of the reverse control channel does not change.

29 - 71. (Canceled)